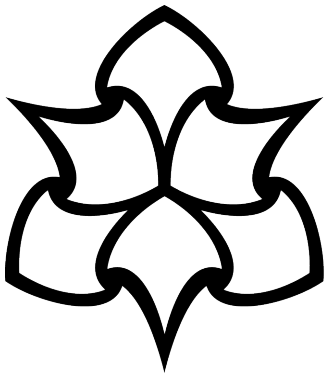

Table 1.

Modality	Imaging biomarker	Examples	Cholinergic cell group(s)
PET	AChE	^{11}C-PMP	Depending on the spatial resolution of the camera, these ligands may allow direct assessment of Ch5/Ch6 and some of the larger cholinergic forebrain nuclei, however, these techniques are more accurate by indirectly assessing the integrity of specific cholinergic groups based on assessment of radioligand binding in their cortical and subcortical target areas.
PET	VAChT	^{18}F-FEOBV	
SPECT	VAChT	^{123}I-IBVM	
MRI	Forebrain MRI	Volumetry, density, DTI	Direct assessment of Ch1-C4 cell groups but measures will also include non-cholinergic elements. New technical advances allow direct assessment of specific Ch4 subnuclei, such as Ch4p.
MRI	PPN	DTI	Direct assessment of Ch5, Ch6 cell groups but measures also include non-cholinergic elements.